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|   | Туре | L # | Hits  | Search Text  |  |  |
|---|------|-----|-------|--|--|--|
| 1 | BRS  | L1  | 280   | cellular near5 radio near5<br>(broadcast or content)                 |  |  |
| 2 | BRS  | L2  | 42    | cellular near5 radio adj<br>(broadcast or content)                   |  |  |
| 3 | BRS  | L3  | 53    | cellular near5 (radio adj<br>(broadcast or content))                 |  |  |
| 4 | BRS  | L5  | 82059 | broadcast\$3   |  |  |
| 5 | BRS  | L6  | 4     | 4 same 5   |  |  |
| 6 | BRS  | L4  | 134   | (audio adj system) with (car or automobile or vehicle) with cellular |  |  |

|   | DBs             | Time Stamp          | Comments | Error<br>Definition |
|---|-----------------|---------------------|----------|---------------------|
| 1 | USPAT; US-PGPUB | 2004/04/29<br>12:30 |          |                     |
| 2 | USPAT; US-PGPUB | 2004/04/29<br>12:30 | ·        |                     |
| 3 | USPAT; US-PGPUB | 2004/04/29<br>12:31 |          |                     |
| 4 | USPAT; US-PGPUB | 2004/04/29<br>12:46 |          |                     |
| 5 | USPAT; US-PGPUB | 2004/04/29<br>12:46 |          |                     |
| 6 | USPAT; US-PGPUB | 2004/04/29<br>12:48 |          |                     |

|    | Туре | L # | Hits | Search Text   |  |  |
|----|------|-----|------|---|--|--|
| 1  | BRS  | L1  | 3958 | nokia.as.   |  |  |
| 2  | BRS  | L2  | 616  | cellular with radio with<br>broadcast   |  |  |
| 3  | BRS  | L3  | 20   | 1 and 2   |  |  |
| 4  | BRS  | L4  | 593  | broadcast with radio with content   |  |  |
| 5  | BRS  | L5  | 699  | 455/41.1-41.3.ccls.   |  |  |
| 6  | BRS  | L6  | 0    | 4 and 5   |  |  |
| 7  | BRS  | L7  | 480  | 455/11.1.ccls.  |  |  |
| 8  | BRS  | L8  | 0    | 4 and 7   |  |  |
| 9  | BRS  | L9  | 3    | (broadcast with radio with content) same bluetooth  |  |  |
| 10 | BRS  | L10 | 1    | (broadcast with radio with content) same ((short adj range) or short-range)                         |  |  |
| 11 | BRS  | L11 | 3    | (broadcast with radio with program) same bluetooth  |  |  |
| 12 | BRS  | L12 | 1    | (broadcast with radio with program) same ((short adj range) or short-range)                         |  |  |
| 13 | BRS  | L13 | 12   | internet same audio same (car or<br>vehicle or automobile) same<br>((short adj range) or bluetooth) |  |  |

|    | DBs                                   | Time Stamp          | Comments | Error<br>Definition |
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| 1  | USPAT; US-PGPUB                       | 2004/04/29<br>11:51 |          |                     |
| 2  | USPAT; US-PGPUB                       | 2004/04/29<br>11:51 |          |                     |
| 3  | USPAT; US-PGPUB                       | 2004/04/29<br>11:55 |          |                     |
| 4  | USPAT; US-PGPUB                       | 2004/04/29<br>11:57 |          |                     |
| 5  | USPAT; US-PGPUB                       | 2004/04/29<br>11:56 |          |                     |
| 6  | USPAT; US-PGPUB                       | 2004/04/29<br>11:56 |          |                     |
| 7  | USPAT; US-PGPUB                       | 2004/04/29<br>11:56 |          |                     |
| 8  | USPAT; US-PGPUB                       | 2004/04/29<br>11:56 |          |                     |
| 9  | ' ' '                                 | 2004/04/29<br>12:00 |          |                     |
| 10 |                                       | 2004/04/29<br>12:01 |          |                     |
| 11 | •                                     | 2004/04/29<br>12:00 |          |                     |
| 12 | '                                     | 2004/04/29<br>12:02 |          |                     |
| 13 | USPAT; US-PGPUB;<br>EPO; JPO; DERWENT |                     |          |                     |



US 20030158614A1

## (19) United States

(12) Patent Application Publication (10) Pub. No.: US 2003/0158614 A1 Friel et al. (43) Pub. Date: Aug. 21, 2003

## (54) AUDIO SYSTEM FOR VEHICLE WITH BATTERY-BACKED STORAGE

(76) Inventors: Joseph T. Friel, Ardmore, PA (ÚS);
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(US); Alan J. MacDonald, Malvern,
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PA (US); David W. Sowa, Exton, PA
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(21) Appl. No.: 10/079,011

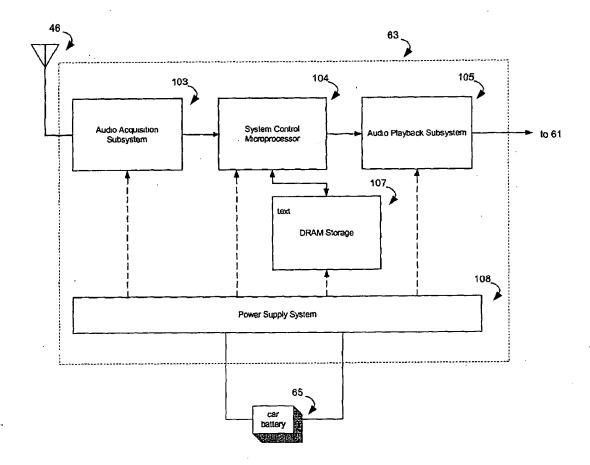
(22) Filed:

( Feb. 18, 2002

## **Publication Classification**

## (57) ABSTRACT

An audio system is mounted in a vehicle and provides playback of digital audio content stored in semiconductor DRAM. Power from the vehicle's battery is constantly applied to the DRAM to retain information even when the vehicle is not operating. The audio content may be acquired by the recording of broadcast radio programs, by streaming content from a wireless Internet connection, from a CD, and/or from a wireless link to a computer. An updated playlist may be provided to the DRAM on a periodic basis or manually under user control.



|   | Туре | L # | Hits   | Search Text                  |  |  |
|---|------|-----|--------|------------------------------|--|--|
| 1 | BRS  | L1  | 299    | 455/41.2.ccls.               |  |  |
| 2 | BRS  | L2  | 34     | 455/41.3.ccls.               |  |  |
| 3 | BRS  | L3  | 678785 | vehicle or car or automobile |  |  |
| 4 | BRS  | L4  | 9229   | radio near3 broadcast\$3     |  |  |
| 5 | BRS  | L5  | 23     | 1 and 4                      |  |  |
| 6 | BRS  | L6  | 14     | 3 and 5                      |  |  |

|   | DBs             | Time Stamp          | Comments | Error<br>Definition |
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| 3 | USPAT; US-PGPUB | 2004/04/29<br>10:19 |          |                     |
| 4 | USPAT; US-PGPUB | 2004/04/29<br>10:27 |          |                     |
| 5 | USPAT; US-PGPUB | 2004/04/29<br>10:28 |          |                     |
| 6 | USPAT; US-PGPUB | 2004/04/29<br>10:28 |          |                     |